



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,208	09/25/2000	You-Sung Chang	68141675-2006000	4052

30256 7590 02/04/2003

SQUIRE, SANDERS & DEMPSEY L.L.P  
600 HANSEN WAY  
PALO ALTO, CA 94304-1043

EXAMINER


SORRELL, ERON J

ART UNIT	PAPER NUMBER
----------	--------------

2182

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/669,208	<b>Applicant(s)</b> CHANG ET AL.	
	<b>Examiner</b> Eron J Sorrell	<b>Art Unit</b> 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> | 6) <input type="checkbox"/> Other:  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldara et al (U.S. Patent 5,982,771 hereinafter Caldara) in view of Mathur (U.S. Patent 6,424,658).

4. Referring to method claim 1, system claim 8, and computer program claim 15, Caldara discloses a method for transferring an incoming datagram comprising:

receiving data of a datagram (see lines 66-67 of column 1 and lines 1-12 of column 2);

sequentially filling the buffer portions with the data from the data gram (see items labeled 14 in figure 1a and lines 66-67 of column 1 and lines 1-12 of column 2);

periodically allowing transfer of data from the buffers into a (see lines 32-39 of column 2); and

transferring the data in one of the buffer portions into switch matrix at each period where transfer is allowed and in the sequence the buffer portions were filled (see lines 32-39 of column 2).

Caldara fails to disclose a switch matrix that can store the data of the datagram.

Mathur discloses a method for storing an incoming datagram in a switch matrix of a switch fabric wherein the data is stored

in the switch matrix after being transferred from the input buffers (see lines 7-11 of column 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the switch of Caldara with that of Mathur such that the switch matrix is capable of storing the incoming packets. Mathur suggests this modification results in a switch with better performance and that can add a larger number of ports without increasing the cost of the switch (see lines 35-52 of column 3).

5. Referring to method claim 2, system claim 9, and computer program claim 16, Mathur discloses the buffers should be large enough to hold an entire datagram, thus the end of the datagram (see lines 57-65 of column 6) and that the buffer holds the datagram before sending it to the switch Matrix (see lines 41-47 of column 6).

6. Referring to method claim 3, system claim 10, and computer program claim 17, Mathur discloses the matrix comprises a plurality of memory banks for storing the transferred data (see figure 9 and lines 10-16 of column 11).

Art Unit: 2182

7. Referring to method claim 4, system claim 11, and computer program claim 18, Mathur discloses the memory banks alternate in receiving data from the buffers (see lines 44-56 of column 11).

8. Referring to method claim 5, system claim 12, and computer program claim 19, Caldara discloses the buffer portions have equal storage capacity (see items labeled 132a, 132b, and 132c in figure 1a).

9. Referring to method claim 6 and system claim 13, Mathur discloses the buffer size should be large enough to hold the largest packet size of 1.5Kbit size (see lines 57-65 of column 6).

10. Referring to method claim 7, system claim 14, and computer program claim 20, Mathur discloses the rate at which data is allowed to be transferred is fully controllable by the system administration software, thus transfer of data could be allowed every 16 cycles.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is

reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR § 1.111(c).

The following U.S. Patent are cited to further show the state of the art as it pertains to switches and switching methods:

U.S. Patent No. 6,185,221 to Aybay

U.S. Patent No. 6,359,861 to Sui et al.

U.S. Patent No. 5,517,495 to Lund et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 10:00AM - 6:30PM.

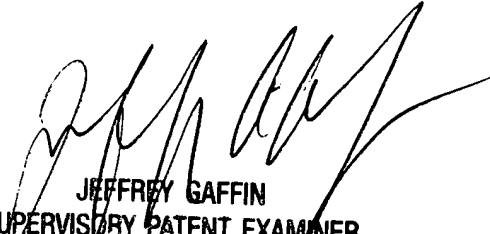
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A Gaffin can be reached on 703 308-3301. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746-7239 for regular communications and 703 746-7238 for After Final communications.

Art Unit: 2182

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

EJS

January 30, 2003



JEFFREY GAFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100